The Capitol Hill Monitor

Volume 14 Issue 1 (2009) January 2009

SCANNING THE 56th PRESIDENTIAL INAUGURATION

America's 44th President, Barack Obama, will take the Oath of Office on January 20, 2009. It is a unique federal holiday that observes the peaceful transfer of power. For scanner listeners the inauguration offers exciting monitoring opportunities unlike any other occasion. The magnitude of this event will be unprecedented in Washington History.

This is the sixth CHM inaugural special. Looking into the past in four-year increments, it is startling how technology and national security continue to transform our hobby. Although we face more encryption and voice-less communication than ever before, all is not lost.

Let this guide be a starting point with your monitoring activities. Please share your findings with the rest of us on the Scan-DC e-mail list (http://mailman.qth.net).

Mike Agner has compiled a list of inaugural Web links for scanner listeners (http://tinyurl.com/inaug09). Keep checking it for updates.

FEDERAL AGENCIES

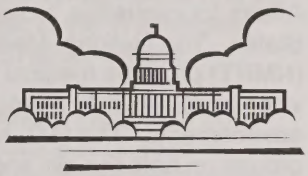
U.S. Capitol Police

Capitol Police channel usage varies from day to day. The department tends to use the first three channels for routine dispatch operations, and its last two for specialized units, command staff, and protection details. Specialized USCPD officers have additional simplex channels beyond 10 which often use the input or output frequencies of channels 3, 4 or 5 but with a different CTCSS or DCS (try the inputs of 164.6, 164.625 and 164.8).

While traveling, USCPD officers have used the common-agency channels of 163.1 and 168.35, either simplex or repeated. The department continues to use analog radios, but has recently purchased some XTS5000s.

U.S. Capitol PD Channels

169.2250 r/s	[156.7]	CH1/6
165.5375 r/s	[118.8]	CH2/7
170.1750 r/s	[107.2]	CH3/8
162.2500 r/s	[146.2]	CH4/9
162.6125 r/s	[127.3]	CH5/10



Other U.S. Capitol Hill Radio Users

167.8875 p	[None]	House Republican Pager
168.3125 p	[None]	House Democrat Pager
173.6375 r	[Astro]	Supreme Court Security
406.3875 r	[d723]	Capitol Tours
408.1250 r	[136.5]	Library of Congress Security
409.5125 r	[d073]	Gov't Printing Office Security
416.1500 p	[None]	Capitol Emer Notification System

National Park Service

166.7250 r/s	[127.3]	U.S. Park PD CH1/6 Secondary
166.9250 r/s	[127.3]	U.S. Park PD CH2/7 Dispatch
167.0750 r/s	[127.3]	U.S. Park PD CH3/8 Admin
166.8500 s	[127.3]	U.S. Park PD CH4 Tactical
168.4250 r/s	[None]	National Capital Parks-East
172.4750 r/s	[Astro]	National Capital Parks-Central
172.7500 r/s	[Astro]	White House Maintenance
171.6500 s	[ ]	White House Tourists Ops

Federal Protective Service

The Federal Protective Service (FPS) digitized its primary radio system in November of 2000. The FPS Astro radios transmit in digital mode by default unless they are replying to an analog signal.

415.2000 r/s [131.8/Astro] CH1/2
411.2750 r/s [131.8/Astro] CH3/4
414.4750 r/s [131.8/Astro] CH5/6

NTIA Passport Trunked System

The Smithsonian museums have transitioned to a Passport radio system in downtown Washington. Passport, a variant of LTR trunking, is not trackable using scanners, but it is analog and can be monitored.

407.0750 t	Voice
407.3750 t	Voice
408.5500 t	Voice
408.8750 t	Voice
410.3125 t	Voice

Health & Human Services Department

DHHS operates, funds and/or oversees several medical teams which will be available during inaugural events. The *Disaster Medical Assistance Teams* (DMAT) provide medical care during a disaster or other event. The *National Disaster Medical System* (NDMS) assists local agencies with the medical impacts of major peacetime disasters and provides support to the military and the Department of Veterans Affairs for casualties brought back to the United States. The *National Medical Response Team* (NMRT) provides medical and decontamination services and/or assists agencies in hazardous materials environments. The D.C. NMRT group uses talkgroups on both the old and new Arlington County trunked system.

407.1250	r	[Astro/100.0]	DMAT
409.0000	r	[Astro/100.0]	DMAT
406.8625	s/r	[Astro/141.3]	NDMS 1/2
407.2625	s/r	[Astro/141.3]	NDMS 3/4
407.4625	s/r	[Astro/141.3]	NDMS 5/6
409.0750	s/r	[Astro/141.3]	NDMS 7/8
412.8375	s	[Astro/141.3]	NDMS 9
412.8625	s	[Astro/141.3]	NDMS 10
412.8750	s	[Astro/141.3]	NDMS 11
412.9000	s	[Astro/141.3]	NDMS 12
412.8875	s	[Astro/141.3]	NDMS 13
409.4625	s	[Astro/141.3]	NDMS 14
34096	t	(hex 853)	NMRT-A (Arl. A1H-old trunk)
35344	t	(hex 8A1)	NMRT-B (Arl. A1I-old trunk)
35376	t	(hex 8A3)	NMRT Cmd (Arl. A1J-old trnk)
00045	t	(hex 02D)	NMRT-A (Arl. A1H-new trunk)
00046	t	(hex 02E)	NMRT-B (Arl. A1I-new trunk)
00047	t	(hex 02F)	NMRT Cmd (Arl. A1J-new trk)

Federal Emergency Management Agency

FEMA, much like DHHS, sponsors several teams that will stage during the inauguration. FEMA has a standard set of channels for use nationwide, and others specifically intended for the National Capital Region (NCR). *Mobile Emergency Resource Support* (MERS) teams provide electronic communications support to local public safety agencies. FEMA will probably place the Fairfax and/or Montgomery *Urban Search And Rescue* (USAR) teams on "alert status" during the inauguration. They specialize in confined-space rescue. Both teams will likely have their county and FEMA radios available for use.

406.4500	s/r	[Astro]	NCR 1-4 DC Main
409.8625	s/r	[Astro]	NCR 5-6 DC Alternate
412.8875	s	[Astro]	NCR 7
412.9125	s	[Astro]	NCR 8
410.8625	s/r	[Astro]	NCR 9/10
407.4500	s/r	[Astro]	NCR 11/12
408.0625	s/r	[Astro]	NCR 13/14
409.4625	s	[Astro]	NCR 15
418.4625	s	[141.3]	NCR Common
406.2625	s/r	[Astro]	FEMA 1/2
407.0625	s/r	[Astro]	FEMA 3/4
407.6625	s/r	[Astro]	FEMA 5/6
409.0625	s/r	[Astro]	FEMA 7/8
410.4625	s/r	[Astro]	FEMA 9/10
407.4500	s/r	[Astro]	FEMA 11/12
412.8250	s	[Astro]	MERS 1
412.8500	s	[Astro]	MERS 2
412.8375	s	[Astro]	MERS 3
412.8625	s	[Astro]	MERS 4
412.8750	s	[Astro]	MERS 5
412.9000	s	[Astro]	MERS 6
412.8875	s	[Astro]	MERS 7
412.9125	s	[Astro]	MERS 8
410.8625	s/r	[Astro]	MERS 9/10
407.4500	s/r	[Astro]	MERS 11/12
408.0625	s/r	[Astro]	MERS 13/14
409.4625	s/r	[Astro]	MERS 15
408.8625	s/r	[Astro/141.3]	USAR 1/2
409.2625	s/r	[Astro/141.3]	USAR 3/4
409.6625	s/r	[Astro/141.3]	USAR 5/6
409.8625	s/r	[Astro/141.3]	USAR 7/8
410.2625	s/r	[Astro/141.3]	USAR 9/10
410.6625	s/r	[Astro/141.3]	USAR 11/12
412.8250	s	[Astro/141.3]	USAR 13
412.8500	s	[Astro/141.3]	USAR 14
04784	t	(hex 12B)	Mont. Co. trunk (74-K)

Federal Communications Commission

The FCC was active during past events in Washington, often tracking pirate broadcasters operated by protesters. Also of concern are threats that activists will interfere with radio communication, or the remote possibility a radio transmitter could be used as a detonator.

167.0500 r [Astro/173.8] FCC field enfo

Federal Bureau of Investigation

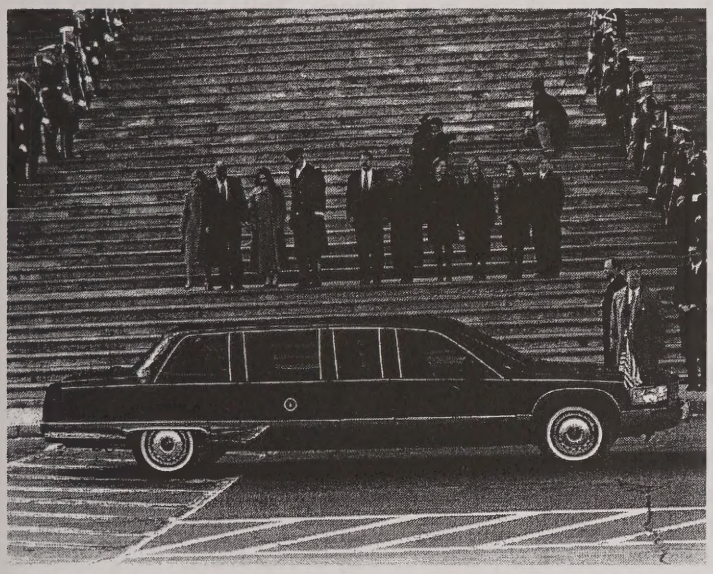
FBI involvement is limited. Agents provide intelligence and advice. In addition, the FBI's SWAT and other specialty units such as the *Joint Terrorism Task Force* (JTTF) will be on duty.

167.4375	r	[167.9]	D.C. Administrative
167.4875	r	[167.9]	Downtown D.C. repeater

State Department

The State Department provides security for the Secretary of State and foreign official visitors, except heads of state, who are protected by the Secret Service. The standard CTCSS was 151.4, but all channels appear to use Astro now.

407.6000 r	[Astro]	Protection details
407.8625 r	[Astro]	Bldg security "Side Door"
408.6000 r	[Astro]	Protection details
409.0375 r	[Astro]	Protection details
409.7125 r	[Astro]	Protection details



Secret Service

The Secret Service protects the president, past presidents and foreign heads of state. Since the inauguration has been designated a *national special security event* (NSSE), the Secret Service assumes its role as the lead agency for the design and implementation of the operational security plan.

Much of the Secret Service traffic is digital and encrypted. The Dept. of Homeland Security Common frequency, 166.4625, once known as Treasury Common, is often a federal law enforcement command post channel. The federal agencies have a slew of relatively new VHF/UHF inter-ops channels (see below).

One may find the Secret Service or an allied agency using additional VHF frequencies not normally used in Washington. Try the White House Communications Agency channels listed in the military section too.

165.7875 s	[103.5/Astro]	Baker
165.3750 s	[103.5]	Charlie
165.2125 s	[103.5/Astro]	Mike
164.6500 s	[103.5]	Tango
164.8875 s	[103.5]	Oscar
164.4000 s	[103.5]	Papa
165.6875 r/s	[103.5/Astro]	Wash Field Office (166.4 in)
170.0000 s	[103.5]	WFO Alternate
166.4625 s	[None]	DHS-Common 1
166.5875 s	[None]	DHS-Common 2
167.0125 s	[Astro]	Vice President's Detail
167.0375 s	[Astro]	President's Detail

Uniformed Division, Secret Service

The UDSS provides security to the White House and selected federal and foreign facilities in the Washington area. See the December 2004 CHM for details.

162.0750 r/s	[Astro]	White House 1 (169.9375 in)
163.3125 r/s	[Astro]	White House 2 (170.4375 in)
170.0000 s	[Astro]	White House Admin/Blair House
164.1750 p	[None]	White House Notification System
166.2000 s	[103.5]	Vice President's Residence
162.3125 r/s	[Astro]	Foreign Missions 1 (171.7625 in)
164.4375 r/s	[Astro]	Foreign Missions 2 (172.5625 in)
170.9875 s	[Astro]	Foreign Missions 3
170.0000 s	[127.3]	Inter Ops (Sec Svc common)
164.1000 s	[Astro]	Canine Tac

Immigrations and Customs Enforcement

136.3750 s	[ ]	ICE Aircraft
164.7750 r	[ ]	
165.2375 r	[ ]	ICE Aircraft and Agents
282.4250 s	[ ]	ICE Aircraft

Alcohol, Tobacco & Firearms

165.2875 r/s	[ ]	Operations (primary)
166.5375 r/s	[ ]	Operations
165.9125 s	[ ]	Unit to Unit
173.8875 s	[ ]	Unit to Unit

Common-Use, Joint Law Enfo and Incident Response

These common-use frequencies are available for use on a shared basis by all federal agencies: 163.1/168.35, 163.7125, 168.6125, 173.625/167.1375, 407.525/416.525, 409.05/418.05, 409.075/418.075, 409.3375/418.3375, 412.825, 412.8375, 412.85, 412.8625, 412.875, 412.8875, 412.9 and 412.9125. The older wide-band channels included: 408.4, 418.05, 418.075 and 418.575.

FCC Public Notice DA 01-1621 established the following frequencies for joint law enforcement. They are programmed in new radios used by Federal agencies in the D.C. area and are designated as "L-E" channels. All use Astro transmission except for 167.0875 which is both Astro and analog with a 167.9 Hz CTCSS: 167.0875/162.0875, 167.25/162.2625, 167.75/162.8375, 168.1125/163.2875 and 168.4625/163.425. The UHF versions are: 409.9875/418.9875, 410.1875/419.1875, 410.6125/419.6125, 414.0375, 414.0625, 414.3125 and 414.3375.

The same notice designated these as joint incident response ("I-R") channels: 169.5375/164.7125, 170.0125/165.25, 170.4125/165.9625, 170.6875/165.575 and 173.0375/167.325. The UHF set is: 410.2375/419.2375, 410.4375/419.4375, 410.6375/419.6375, 410.8375/419.8375, 413.1875 and 413.2125.

MILITARY AGENCIES

Armed Forces Inaugural Committee (AFIC)

During past inaugurations, AFIC reduced its radio traffic almost by half through the use of computer systems and that trend will likely continue. But AFIC has always made a partial appearance on repeater and simplex voice channels in the lower VHF band. During each inauguration the frequencies vary but always came from the 138-144 MHz and 148-151 MHz band. AFIC's command and control nets in recent times have also operated on Belvoir's trunked system, which has been consumed by the JFHQ-NCR 380 MHz trunked network.

Joint Force Headquarters — National Capital Region

The recently formed JFHQ-NCR is responsible to help plan and coordinate military assistance for homeland defense and civil support in the region. Joint-NCR was formally activated on Sept. 22, 2004 and provides a common command structure for all Defense Department forces including the Coast Guard in the greater Washington, D.C., area. Major component commands include the Army *Military District of Washington* (MDW), the Naval District of Washington (NDW), the Marine Corps National Capital Region Command and the 11th and 89th Air Force Wings.

The Army's MDW has overall responsibility for the coordination and operation of DoD participation in government ceremonies in the capital area. MDW will provide transportation, logistical support and limited security. MDW's command, ops and logistics nets are known as "State Sword."

In addition to overseeing the DoD elements, JFHQ-NCR's mission is to coordinate and act as a liaison with local law enforcement and first responders throughout the NCR and beyond. Some talkgroups on its trunked network are patched or patched-capable with civilian public safety channels.

During the 2005 Inauguration, the JFHQ-NCR 380 MHz trunked network was in its infancy. Today it is a massive system of networked sites that links facilities under the JFHQ-NCR command. Many of the system's talkgroups are encrypted, but not all. Those sites closest to D.C. are shown here.

Users can roam the system and operate off any networked radio site. That makes monitoring difficult since there is no guarantee that one of the users will always be affiliating on the talkgroup one is monitoring on a particular site.

For a complete list of talkgroups, see **Travis McNerney's** Website: http://tinyurl.com/4z3zc2

Talkgroups that will probably apply most to the 2009 Inauguration include the 200's which are used at the Pentagon and by the *Pentagon Force Protection Agency*, 300's at Fort Myer, and 400's by JFHQ-NCR.

001-0101 Fort Belvoir, VA 381.675, 381.825, 381.975, 385.0125, 385.2125, 385.8875, 386.1875, 386.3375.

001-0303 Bolling AFB, DC 386.0625, 386.9625, 388.2625, 388.8875, 389.1625, 389.2375, 389.4875.

001-0606 Bethesda NNMC, MD 385.0875, 385.325, 385.725, 385.9375, 387.175, 387.475, 387.975.

002-0101 Ft Myer, VA 380.0625, 380.325, 380.375, 380.625, 380.675, 380.825, 380.975, 381.0875, 381.2375, 381.2875, 381.625, 381.775, 381.925.

002-0202 Ft McNair, DC 380.2125, 380.525, 380.775, 381.1375

007-0202 Army Research Lab Adelphi, MD 389.575

008-0101 Tysons Corner, VA 380.075, 380.425, 380.725

009-0101 Silver Hill, MD 380.275, 380.575, 380.875, 381.7375

010-0202 NGA Bethesda, MD 385.8625, 387.1875, 387.4625, 387.7875, 389.075

00C-0101 Walter Reed AMC, DC 385.7125, 385.9125, 386.2125, 386.5625, 386.8125

White House Communications Agency (WHCA)

Another important military element which provides support to the inauguration as well as the president is the *White House Communications Agency* (WHCA). WHCA personnel routinely use Secret Service and DoD channels.

169.9250 s Delta
167.9000 s Hotel, White House Motor Pool
166.7000 s November
166.2000 s Naval Support Facility, Camp David
166.5125 s Sierra
167.0250 s Whiskey (old paging channel)
162.6875 d Yankee (old phone patch base)
171.2875 d Zulu (old phone patch mobile)
375.0000 s Helipad Comms

Andrews Air Force Base

Andrews AFB channels may be especially interesting prior to and after the inauguration as various VIPs arrive and depart. The base has a unique set of talkgroups on its 380 MHz trunked system.

17a-0101 Andrews AFB, MD 385.2125, 385.3125, 385.9, 385.9125, 386.0375, 386.2, 386.3375, 386.6375, 386.8.

Andrews Aviation Freqs

118.400 / 349.000	Andrews Tower
119.300 / 335.500	Arrival
139.300 / 372.200	Pilot to Dispatch
124.000 / 279.575	Arlington Cemetery Fly-bys
125.650 / 348.725	Departure
141.550 / 378.100	Command Post & Wing Ops
141.700 / 292.200	1st Helo Squad, 89th A/W, "Mussel"
251.500 / 362.900	Navy Ops
344.600	Metro (WX)
351.200	Liberator (756th ARS) Cmnd Post

Fort Belvoir/Davison Army Airfield (DAA)

Davison Army Airfield provides "shuttle" services around the Military District of Washington for military VIPs.

118.850	Davison AAF GCA/P
119.950	Davison AAF RADAR
121.900	Ground Control
126.300	Tower
139.400	Davison AAF Metro "Davey Ops"
229.400	Tower
241.000	Tower
245.200	Clearance Delivery/Ground Control

Pentagon Heliport (JPN)

231.300	Tower
287.600	"Foghorn Control"

USMC Executive Flight Squadron

The Marine Corps presidential and vice presidential executive flight squadron is known in military circles as *HMX-1*, to the Secret Service as *Nighthawk*, and to the public as *Marine 1* or *Marine 2*. Helos are based in Quantico, but often stage in Anacostia.

265.800	Quantico Common
273.950	Squadron Operations
276.400	Squadron Operations
320.400	Quantico Maint
355.300	Quantico Base Ops

Combat Air Patrols

139.700	Huntress, Coast Guard Helos
139.900	Huntress, Coast Guard Helos
260.900	Huntress
228.900	Huntress
135.525 / 350.250	Guard Dog CAP control

Many thanks to **Ron Perron** for selecting these frequencies! Also see the marine channels on page 7.

Military Intra-Squad Radios

The military has 14 channels similar to the civilian FRS band: Ch.1 396.875, Ch.2 397.125, Ch.3 397.175, Ch.4 397.375, Ch.5 397.425, Ch.6 397.475, Ch.7 397.55, Ch.8 397.95, Ch.9 398.05, Ch.10 399.425, Ch.11 399.475, Ch.12 399.725, Ch.13 399.925 and Ch.14 399.975.

LOCAL GOVERNMENT

D.C. Fire & EMS

Digital Motorola trunk: 852.6125, 852.6375, 852.6625, 852.6875, 852.7125, 852.7375, 852.7625, 852.7875, 855.2125, 855.2375, 855.4625, 856.9875, 857.9875, 858.9875, 859.9875 and 860.9875

Selected D.C. Fire/EMS talkgroups:

01616t	(hex 065)	0-01 Dispatch (154.19 simulcast)
01632t	(hex 066)	0-02 Main
01648t	(hex 067)	0-03 Fire Ground 03
01904t	(hex 077)	0-11 EMS 1
01920t	(hex 078)	0-12 EMS 2
01776t	(hex 06F)	0-A-03 Fire Ground A3
02096t	(hex 083)	0-A-11 Special Event 1
02112t	(hex 084)	0-A-12 Special Event 2
02128t	(hex 085)	0-A-13 Special Event 3
02016t	(hex 07E)	0-B-03 Fire Ground B3
02080t	(hex 082)	0-C-05 Fire Inspectors
02240t	(hex 08C)	0-C-08 Special Ops

02640t	(hex 0A5)	0-C-09 Fire Boat Ops
09840t	(hex 267)	0-C-13 Fire Ops Command
867.7625 r/s	[156.7]	VRS/DIR 1
867.4875 r/s	[156.7]	VRS/DIR 2 (veh repeater sys)

The below talkgroups are on the same trunked system as D.C. Fire/EMS but some may be patched through to the MPD UHF trunked system for coordination.

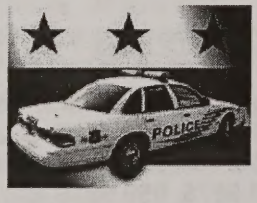
02656t	(hex 0A6)	DC-Unified Comm Ctr (UCC)-1
09936t	(hex 26D)	NCR-Mutual Aid Fire 1
09968t	(hex 26F)	NCR-Mutual Aid Fire 2
09984t	(hex 270)	NCR-Mutual Aid Fire 3
10032t	(hex 273)	NCR-Mutual Aid Fire 4
33872t	(hex 845)	DC Homeland Sec-Emer Mngt
34832t	(hex 881)	DC Prot Svc (bldg security)
35600t	(hex 8B1)	Traffic Management
59952t	(hex EA3)	NCR Mutual Aid 1 (fire/police)
59968t	(hex EA4)	NCR Mutual Aid 2 (fire/police)
59984t	(hex EA5)	NCR Mutual Aid 3 (police)
60000t	(hex EA6)	NCR Mutual Aid 4 (police)

Metropolitan Police Department

Talkgroups that will likely be assigned for special use during the inauguration and other special events appear below. Encrypted-only groups have been omitted. Talkgroups will be assigned to various details and elements as required, including MPD's Civil Disturbance Units (CDU), traffic, vending, prisoner control and Special Operations Division (SOD). Most inaugural sites and visitor locations are within the 1st, 2nd and 3rd districts which are listed along with the talkgroups likely to be used for special events.

Digital Motorola trunk: 453.45, 460.025, 460.1, 460.15, 460.2, 460.25, 460.275, 460.325, 460.35, 460.375, 460.4, 460.425, 460.45, 460.475 and 460.5

MPD Talkgroups



16400t	(hex 401)	1st District
16432t	(hex 403)	2nd District
16464t	(hex 405)	3rd District
16624t	(hex 40F)	Citywide 1
21232t	(hex 52F)	Citywide 2
16656t	(hex 411)	SOD 1, Special Events
18288t	(hex 477)	Special Events 1
18320t	(hex 479)	Special Events 2
18352t	(hex 47B)	Special Events 3
18384t	(hex 47D)	Special Events 4
21136t	(hex 529)	Tactical 1
21168t	(hex 52B)	Tactical 2
21200t	(hex 52D)	Tactical 3
21360t	(hex 537)	Command

In its old conventional UHF radios, MPD SOD traditionally made regular use of simplex channels for special events. The new UHF digital simplex freqs are below. The VHF channels are used for inter-agency comms.

MPD Conventional Freqs

158.7900 r	[Astro]	(156.03 in)
158.8500 r	[Astro]	SOD escorts patch (156.09 in)
159.1500 r	**[Astro]**	**DC inter-op 1 (155.25 in)**
168.8750 r	**[Astro]**	**DC inter-op 2 (162.975 in)**
458.0375 s	[Astro]	SOD Surveillance 1
453.9375 s	[Astro]	SOD Surveillance 2
460.0625 s	[Astro]	Citywide Surveillance 1
460.3375 s	[Astro]	Citywide Surveillance 2
460.2625 s	[Astro]	Citywide & SOD Surveillance 3

Other District-Related Agencies

47.4200 s	[None]	American Red Cross
52.7500 s	[150.0]	DC Nat'l Guard CP ("DC Ops")
463.475r r	[205]	Golden Triangle Business Imp
464.3500 r	[71.9]	Hypothermia Vans
488.3125 r	[606]	D.C. Jail (in case of arrests)

Common Mutual Aid Channels

Visiting police, EMS and fire agencies will assist using D.C. Fire/EMS and their own radios. The mutual aid and COG channels are receiving more use during special events these days. The 800 MHz channels use a CTCSS of 156.7 Hz. But by agreement, the COG (also known as RINS) channels may be used for digital or analog intra-agency communication without the 156.7 Hz CTCSS. The VHF channels use no tone.

123.0250 s	Public Safety Helos (helicopter common)
154.2800 s	Fire Mutual Aid 2
154.2950 s	Fire Mutual Aid 1
462.4000 r	Hospital Mutual Aid [CTCSS 77.0]
866.0125 r/s	National Calling Ch (8-Call-90-R/D)
866.5125 r/s	National Tac 1 (8-Tac-91-R/D)
867.0125 r/s	National Tac 2 (8-Tac-92-R/D)
867.5125 r/s	National Tac 3 (8-Tac-93-R/D)
868.0125 r/s	National Tac 4 (8-Tac-94-R/D)
866.3625 r	Police Mutual Aid
868.5125 r/s	Council of Governments 1
866.8375 r/s	Council of Governments 2
867.2375 r/s	Council of Governments 3
867.4875 r/s	Council of Governments 4
866.8625 r/s	Council of Governments 5
867.7625 r/s	Council of Governments 6

Suburban Police Agencies (possibly involved)

39.5400 s	VSP SIRS
139.0625 r	MD National Guard
154.6650 s	VSP CH15 Tactical
154.6950 s	VSP CH16 Surveillance
154.6800 s	VSP Executive Protective Unit
453.3500 r/s	MSP CH1/2 Exec Prot Div (statewide)
453.7250 r/s	MSP CH5/6 Exec Prot Div (College Pk)
494.8875 r/s	Prince George's Co CH6A/B SOD Tac
494.9375 r/s	Prince George's Co CH7A/B South Tac

TRANSPORTATION

Washington Metropolitan Area Transit Auth (WMATA)

WMATA has been slowly migrating to a 490 MHz mixed analog/digital Motorola trunked system. The VHF channels will continue to be used through the inauguration, but expect additional talkgroups to be activated on the WMATA trunked system which transmits on: 490.7875, 490.8375, 490.8625, 490.8875, 490.9125, 490.9625, 496.3375, 496.4375, 496.4875, 496.5375, 496.5625, 496.5875 and 496.6125.

161.3850	r/s	CH1/2 Bus/Rail Police
160.2600	s	Rail Ops
160.3800	s	Rail Ops
160.6200	s	Rail Ops
161.2350	s	Rail Ops

Amtrak and Union Station

160.2900	r	CH1 Yardmaster
160.3500	r	CH2 Train Maintenance
160.4400	r	CH3 Station Ops
160.9200	s	Amtrak Road
161.2950	r	Amtrak Police Primary
161.2050	r	Amtrak Police Tac/Car to Car
173.3750	s	Amtrak Police CID
464.5750	r	Union Station security [DCS 346]

Metropolitan Washington Airports Authority (MWAA)

MWAA is the authority which runs Reagan and Dulles airports. It has its own digital Motorola trunked radio system. MWAA police often escort dignitaries to/from the airports using this radio system. Frequencies are: 866.05, 866.675, 866.725, 866.8875, 866.925, 867.2, 867.35, 867.4375, 867.4625, 867.5375, 867.5625, 868.2125, 868.7125 and 868.8.

Ron Perron and **Vince Destajo** provided freqs for National Airport. Note that 134.35 will replace 120.75.

Washington National Airport (Mount Vernon Sector)

118.300 / 306.300	Final East DCAFE
118.950 / 257.200	West 9500'& below TYSON
119.100 / 257.600	Reagan Tower
119.300 / 335.500	Approach ADWAR
119.850 / 322.300	West QJAAY
120.750	Wash Helo Control
134.350	Wash Helo Control (after Jan. 15)
121.050 / 343.700	West 10,000' up to FL 230 FLUKY
121.500 / 243.000	Aircraft Emergency
124.000 / 279.575	Andrews for Arl Flyovers, ADWFR
124.200 / 269.000	East ENSUE
124.700 / 338.200	Final West DCAFW
125.650 / 348.725	East 9500' & below KRANT
126.550 / 269.500	East 10,000' up to FL 190 DAILY
128.350 / 270.275	SE 19,000' down TO 3000' DEALE

D.C. Harbor, Coast Guard, Fireworks Details

156.8000 s	Marine CH16 (Hailing, Distress)
156.8500 s	Marine CH17 (D.C. Harbor Patrol)
157.0500 s	Marine CH21 (CG, Blackjack helos)
157.1500 s	Marine CH23 (CG Sta. Washington)
157.0750 s	Marine CH81 (CG Aux/MSO)
157.1750 s	Marine CH83 (CG, Air Sta. Atl. City)
345.0000 s	Coast Guard UHF Primary
237.9000 s	Coast Guard UHF Secondary
326.1500 s	Coast Guard UHF Working Primary
379.0500 s	Coast Guard UHF Working Secondary

NEWS MEDIA

These frequencies are those more commonly used by the media in Washington. Expect to find additional ad-hoc frequencies used just for this event. *Washington Executive Broadcast Engineers* (http://www.webe.org/) is the recognized media frequency coordinator. WEBE is coordinating the use of additional spectrum for broadcasters. Expect TV networks on various frequencies in the UHF TV-band starting at 470 MHz (TV Ch.14).

IFB (interruptible fold-back) channels are used to relay broadcast audio to crews in the field. The feed can be interrupted by the director to provide cues and instructions. Channels used by engineering crews (electronic news gathering) are listed as ENG.

Local Stations

153.0500 s	[d331]	WRC Desk
450.4500 s	[d306]	WRC CH1 ENG
455.1500 s	[d306]	WRC CH3 IFB
161.7300 s	[None]	WTTG CH1 Desk
161.7600 s	[None]	WTTG CH2 Alternate
450.1125 r	[d311]	WJLA CH1 Desk
450.2625 r	[d311]	WJLA CH2 ENG
450.7500 s	[141.3]	WUSA CH1 unit-to-unit
450.2125 s	[141.3]	WUSA CH2 unit-to-unit
450.0875 s	[141.3]	WUSA CH3 Sky9
450.1875 r	[141.3]	WUSA CH4 Desk
455.9125 r	[141.3]	Metro Traffic

Television Networks

450.4125 s	[136.5]	ABC IFB
455.0875 s	[136.5]	ABC CH1 Desk
455.5875 s	[136.5]	ABC CH2 ENG
450.5875 s	[136.5]	ABC CH3 Couriers
450.0500 s	[107.2]	CBS CH3 Maint 2
450.1500 s	[107.2]	CBS CH1 Maint 1
450.2875 s	[107.2]	CBS CH4 Desk
450.4875 r	[107.2]	CBS CH2 Desk
450.5125 r/s	[107.2]	CBS CH6/10 Techs
450.6125 s	[107.2]	CBS CH11
450.7500 s	[107.2]	CBS CH12
450.8000 s	[107.2]	CBS CH5/9 IFB 1
455.2625 s	[107.2]	CBS CH13
455.2875 s	[107.2]	CBS CH8 Freq 8
455.6125 s	[107.2]	CBS CH7 IFB 2

161.6700 s	[331]	NBC Desk
450.5500 s	[306]	NBC CH2 IFB
455.8500 s	[306]	NBC CH4 IFB

Cable News Networks

450.1875 r/s	[127.3]	CNN CH1/2 ENG
450.8875 r/s	[127.3]	CNN CH3/4 Desk
450.5625 r	[d165]	C-SPAN Field Base
495.4375 r/s	[d243]	Fox News
495.4625 r/s	[d243]	Fox News

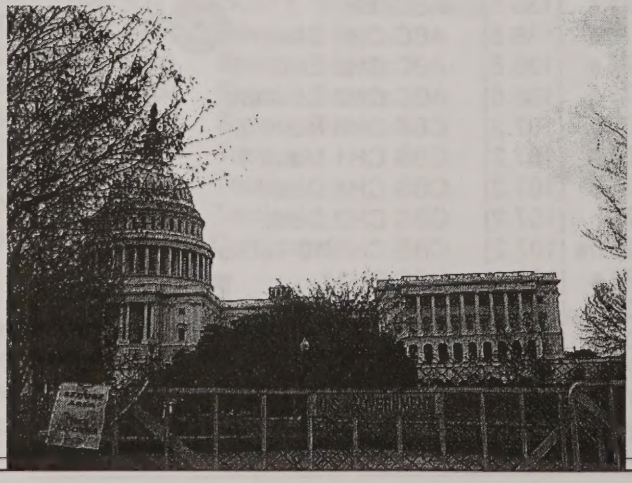
Voice of America

412.2125 s	[ ]	IFB
412.2375 s	[ ]	IFB
412.7750 s	[ ]	IFB
412.8125 s	[ ]	IFB
412.8250 s	[ ]	IFB
412.8375 s	[ ]	IFB
412.8500 s	[ ]	IFB
412.8625 s	[ ]	IFB
415.9375 s	[ ]	Two-way
418.0500 s	[ ]	Two-way
418.5750 s	[ ]	Two-way

INAUGURAL SITES

A tentative list shows 10 official balls at five locations. These balls are traditionally visited by the president and vice president. They are: Commander-in-Chief's Inaugural Ball at the National Building Museum, Eastern Inaugural Ball at Union Station, Southern Inaugural Ball at the National Guard Armory; Obama Home States Inaugural Ball, Biden Home States Inaugural Ball, Mid-Atlantic Inaugural Ball, Midwest Inaugural Ball, Western Inaugural Ball, and the Neighborhood Inaugural Ball at the Washington Convention Center; and the Youth Inaugural Ball at the Washington Hilton.

In addition to these official ball locations, there will be more official and countless unofficial events throughout the region. **David Schoenberger** has done a great deal of frequency research on these various Washington landmarks. Make certain to consult his Website for specific frequencies: http://tinyurl.com/schoenberger



MONITORING INAUGURATIONS for 32 Years!

*By **John Coker** (n9fam@comcast.net), N9FAM*

Alan Henney asked me some time ago if I would put down my recollections of monitoring past Presidential Inaugurations for the Newsletter. When I agreed to do so, I didn't realize how difficult it would be to summarize that span, plus just how far the monitoring hobby has come in the past 40+ years. But here goes.

My first Inauguration was in 1977, or 32 years ago. I believe I have monitored at all but one inauguration since then (one where it was so cold all ceremonies had to be moved indoors; I picked a good year to skip going to DC!). Since I have always lived in Peoria, Illinois, 150 miles from a major city, I probably should first explain how I came to be a political monitoring junkie.

Former U.S. Senator Everett M. Dirksen was from Pekin, Illinois, which is only about 10 miles from where I grew up in Peoria. Dirksen was the Republican leader of the Senate for about 10 years. As such, he regularly orchestrated visits to Peoria by Dwight Eisenhower, Richard Nixon, and numerous other dignitaries. Coupled with later having Robert Michel, the Republican Congressional Whip from Peoria, we were blessed with Presidential visits for many years, especially in election years. When President Nixon attended Dirksen's funeral in Pekin in 1969, I hit the jackpot by accidentally finding 165.375 (Secret Service channel "Charlie") alive with traffic preceding the event. We were hearing the Secret Service and presidential staff, and often hearing things they never suspected anyone could hear on their "classified" frequencies. A couple of us locally were immediately hooked on finding more channels, which we did over the next 4 or 5 presidential visits, and at other opportunities in Chicago and St. Louis.

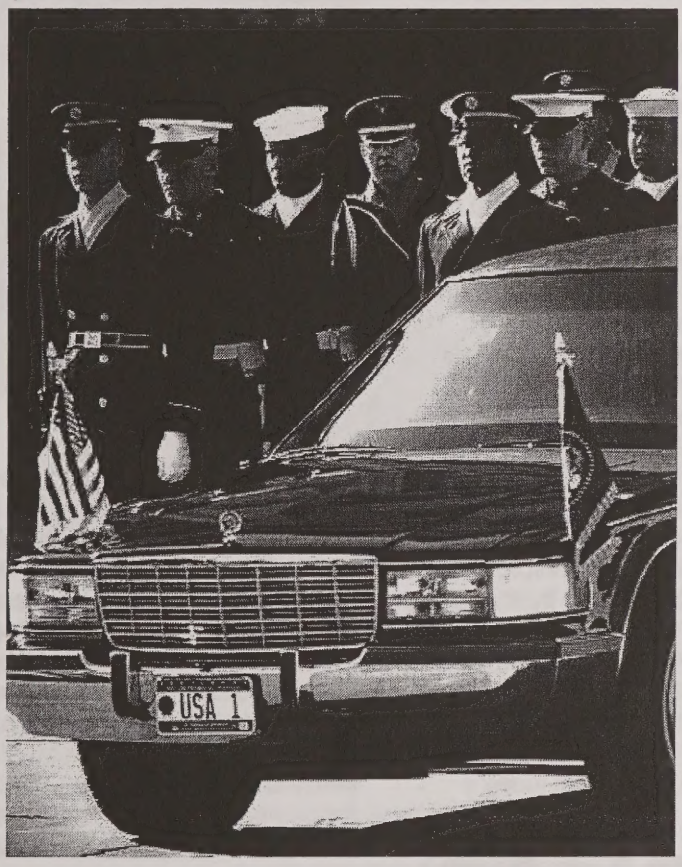
By 1980 I had accumulated possibly the best private list of USSS frequencies, USSS callsigns, and wideband FM "MUX" channels at that time ...many found in or near to Peoria, Illinois! A nearby friend was becoming an expert on the HF Air Force One "Foxtrot" channels, and jointly we listened to the AF1 Satellite channels (then on FLEETSATCOM). Every time there was a presidential visit, I would camp out for days, working on finding new channels, and watching & listening to the preparations.

Probably the most memorable accomplishment was finding the elusive "Quebec" channel (166.70 MHz at that time). Several of us working in tandem in vehicles ahead of and behind the motorcade finally found that channel, which was basically a weak 'intercom channel' used only between the presidential limousine, and the chief of staff's car. I think it took us about 4 years to find that one frequency!! Another big find was the Y-Z pair,

used for a clear-voice phone patch to the limo and to Air Force 1. Since the Prez only came to town every 2-4 years, it was quite an accomplishment for us.

Developments in Radios: From Tunable Monitor Radios to Crystal-Controlled Scanners, and then Synthesized Radios

Back then I and my fellow monitoring friends were not fully aware of the frequency groupings and spacings for the federal bands. We spent a lot of time reading hobby newsletters (like the old RCMA), the old NTIA "Unclassified" Frequency Lists, and I made a couple of trips to the FCC offices in Chicago and DC to review ITU and IRAC documents. I had various tunable monitors, and usually found new channels by first tuning into them very carefully on a tunable scanner with a tight filter. I had a cheap frequency counter, and an equally cheap signal generator, and would 'frequency beat' the newly found frequency very carefully at low power, to try to read the most exact frequency I could tune. I would then invest in crystals for the believed 'exact' frequencies. Sometimes I was right on; other times off just enough to be frustrating. Of course, crystals had to be ordered, so there was always a significant delay in verification. And, crystals ran about $2-3 each, in bulk quantities. I learned how to get double duty out of crystals, by ordering them for Bearcat scanners (with a 10.8 MHz i.f.), but also able to use them in Regency and other radios (10.7 i.f.). Of course, when the Bearcat 101 (the first real synthesized scanner) came out, I was overjoyed, and over time traded in over a dozen 8-channel scanners for six of the 16-channel BC101's.



After synthesized scanners, the next big breakthroughs were "near capture effect" frequency counters like those from Opto Electronics (now called Close Call, Signal Seeker, Sweeper, etc. and built into scanners), and then trunking scanners, all coming just a little behind the need for them. Of course, now the APCO P-25 scanners are the latest technological jump. Quite a change from my old tunable Realistic Patrolman receiver that I used for at least three Inaugurations!

My Early Trips to DC

In the 1973-1976 timeframe I got the opportunity to make several business trips to the east coast, with stops in Washington or Baltimore for a weekend. I was single then, so twice a year I also spent much of my vacation time driving to the east coast, with always at least a week or so in the Washington area. I learned about a lot of the military and Special Relocation Facilities, and related communications in general around the Federal Arc. This was no mean feat...this was when most scanners were 8 channels, crystal controlled, so it was a tedious and expensive hobby. There were very little (accurate) frequency lists available.

My car was filled with scanners, crystals, some 'tight' tunable receivers, and the signal generator and frequency counter. But, the worst part was the intensity of dealing with the noise and intermod induced in so many scanners in my hotel room. After 6-8 hours of trying to listen to so much noise, I was usually 'wasted' for the rest of the day/evening.

Another thing I clearly remember was staying up for the 1 a.m. daily radio checks between Crown and Camp David ("Cactus"). For several years, the "Alpha" channel was referenced, but never heard, until I simply started at 30 MHz and found it a couple of nights later at 32.23. Another hard frequency find, although its usefulness was highly questionable as nothing of importance ever occurred on Alpha to my knowledge! It was just the challenge, I guess, of finding something no one else had yet claimed.

Finding the "Good Stuff" to Monitor

Over the years I've found that there is one constant in federal protective monitoring: one needs to get 'in close' to find many of the protective or investigative type channels. (Close but not TOO close! Stay out of sight and out of the way.) You can hear repeaters for miles, but there is a lot of other activity that doesn't go out on a repeater (at least until trunking systems!). Because of this, I've found it necessary to find a monitoring post as close to the action as possible. In the case of a political convention or an inauguration, that means finding a ho-

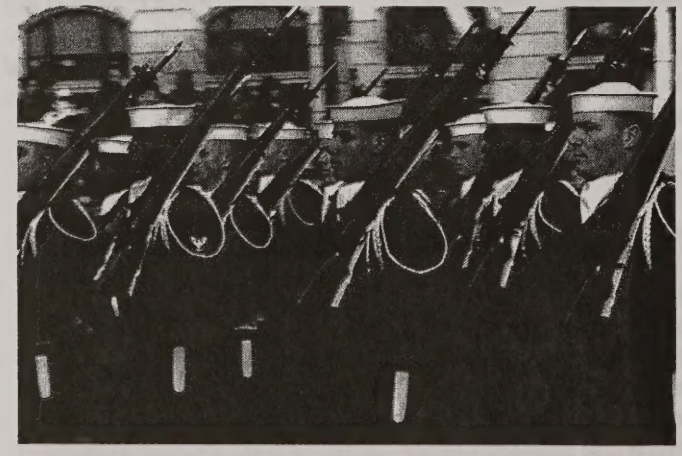
tel as close as possible. But, thank goodness my wife usually doesn't want to put up with my scanning nonsense, and I can usually go alone, and pick a cheaper hotel than she would accept. Some of the hotels have not been the best, but entirely satisfactory for my monitoring.

I've probably stayed in over two dozen hotels and motels in downtown DC or near National Airport over the years. I preferred the former Holiday Inn at 17th and Rhode Island, but they got pricey, so I moved down the street to the one at 15th and Rhode Island for a few years, then to the former Howard Johnson's (unknown name now) between 14th and 15th Streets NW. Four years ago my wife came along, so we were back at the Holiday Inn Central, but my listening time was cut in half.

What about Encryption? Is It the "End of an Era" in Federal Monitoring?

Not in my opinion. I've found the general interest waning lately in monitoring Federal channels, but it's still my favorite area. Contrary to statements like "it's all encrypted", there is still a BUNCH of federal and military activity you can hear. But, it does take a lot more work to keep up.

By about 1984, I had found most of the DC-area federal channels, but then things started changing rapidly. UHF channels became much more common, widespread encryption was being tested and implemented by the FBI and USSS, and new frequencies and multi-site systems were exploding in use. Shortly thereafter, I think, federal trunking started. Although feared at the time, I now feel trunking has become a real boon to federal monitoring, when the talk groups are not encrypted! And new P25 systems are so expensive, that I expect today's systems to be around for another decade or more.



Time and Technology Continue to March On

Unfortunately, after I got married in 1984, my trips to DC were cut down, primarily to just the Inauguration years. I quickly lost touch with local frequency changes and additions, and in particular lost out on the conversions to the various federal trunking systems. Today I feel very 'dumb' about DC-area channels and federal agencies, but that doesn't keep me from trying to figure out what is on the air! I'll be there in January, working from a hotel in Rosslyn, and making trips downtown to verify things I find by searching while comfortable in the hotel.

I'll stick my neck out and project that there will be at least a couple hundred active federal channels in use that inauguration week, with about 50% still in the clear! Coupled with monitoring the DC-area local government channels, and watching coverage on TV, I'll still probably be one of the best informed folks in real time that week. I just won't be able to be in two places at the same time, which means I'll have to decide between getting into the midst of the crowds with a portable, or sitting in the comfort of a hotel room, but with the availability of more equipment, on-line computer access, my frequency lists, TV coverage, etc. The weather may help me make that decision, too.

Another monitoring effect of technology is the availability of frequency information via the Internet and various reflectors, such as SCAN-DC. The accuracy of some information is highly suspect, especially the 'frequency collectors' who simply republish old rubbish that they don't verify themselves. But, compared to the days of no networks of radio hobbyists, the Internet and related information sources is like finding heaven.

Impact of 9/11 and Security Changes on Monitoring Major Events

I have never been one wanting to attract attention to myself and my scanners, and all of the Security improvements implemented in the last few years have accentuated that policy. I try to not draw unwanted attention to myself by wearing 4 portables on my belt, an antenna on my hat, etc. I also don't get real close to an

event, if I can monitor from a block away, for example. Getting inside the security perimeter may sometimes mean you can't carry a scanner, or even a decent camera. Outside the perimeter can be quite interesting, especially if there are demonstrators. But, that is another reason to be discrete and not too obvious. Your day may be ruined if you get caught up in one of the demonstrations by being a little too nosey. Discretion is always a good policy, unless (maybe) you have Media credentials.

How I'll Monitor this Inauguration

I'm walking into this Inauguration with pretty much a clean sheet of paper. There have been so many changes recently in federal systems, that I consider my old frequency lists to be pretty much toilet paper and more confusing than useful.

Today I have switched to mostly portables and computer-controlled search programs. I haven't had the time to refine my equipment and software much, so I'll be running a little behind the technology, but I'll still probably have a lot of fun! This Inauguration I'll actually be arriving by train, and be primarily depending on a BC296D and a GRE PSR500, and a single laptop. On another old beat up laptop or two, I may be running PROBE software to find and verify some channels too. I'll search the federal bands for activity, then program up the PSR500 for more close-in usage. I'll expect to hear a lot of encrypted P25 traffic, but I've gotten good at tuning it out in my head. And, I'll not be surprised to see some agencies fall back to clear voice some of the time.

I remember when I'd have at least a dozen radios running all week, but now "Less is More". A more reasonable number of radios allows for saner listening, and for more fun, with far less work. My philosophy for searching has also been streamlined over the years. I search, not scan, for active frequencies, try to identify them, and then 'unlock' them if they are trite ones, or not directly related to the event being targeted. For example, I may log a lot of FBI channels, but if mostly encrypted or probably unrelated to the Inauguration, they'll get dropped from my scanlist. I may miss something later, but this monitoring by exceptions helps save my sanity.

I usually try to keep one radio programmed with the 'important' channels, and the ones I want to monitor while out of the hotel. So, after a while, the searching radios become fairly quiet, as I unpunch channel after channel and/or reenter the good ones into the walking portable. Then, a new 'find' is much more obvious from otherwise mostly quiet radios.

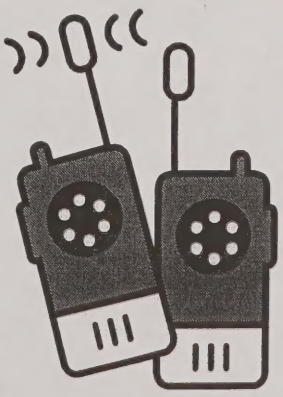
Today my 'walking portable' radio is the GRE PSR500, with up to 1800 frequencies and talkgroups. By the end of my stay it will probably be getting full. Of course, having so many channels takes a long time to cycle through the list, but that also helps cut down on the noise. I group them into the 20 scanlists, so if I need to, I can cut out entire groups to speed up the scanning if something happens that requires it. For example, Military Air traffic probably will get dropped during the evening hours or during the parade.

When I can drive to an event like an airshow or political event, I'll usually take more radios, namely some PRO-2042's and an Icom ICR7100. But, as I had to do for the Denver DNC this year, traveling by train to DC will limit my radio inventory to two large suitcases, including my clothes.

Since the feds are primarily an 8-5 M-F operation, after hours, "in my spare time", I run the finds. Those that are in use after-hours are usually either (1) obvious stuff like the Post Office and VA, or (2) the much more interesting stuff, like protective details, surveillance, or 24-hour security operations. So, for me, federal monitoring is still a 24/7/365 hobby. During the Inauguration, I'll live on 3-4 hours of sleep a night, but it will be worth it!

Summary

There'll be a lot to hear during the Inauguration, and I recommend you try to set aside some time to listen. I'll be on-line often while in town, and hopefully having time to post most evenings to SCAN-DC. Feel free to email me that week, but be aware, that if I'm preoccupied with something, I may not give you a speedy reply. Also, availability of wireless access may become an issue, that's why I'm thinking most my on-line time may be late the evening after the action dies down on the radios.



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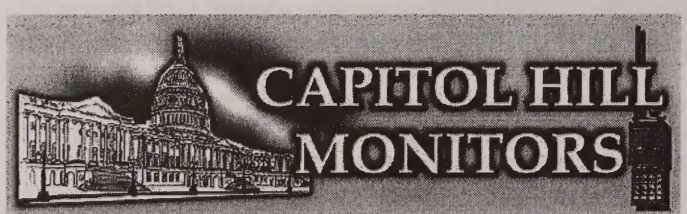
Pleasant Listening!

73, John Coker

The Capitol Hill Monitor
c/o Alan Henney
6912 Prince George's Avenue
Takoma Park, MD 20912-5414

Inauguration Edition!



Please address all correspondence to Alan. We encourage readers to submit material and write articles that relate to the hobby. All submissions are subject to editing for style and content. When submitting material please make certain we can contact you should we have any questions. We welcome frequency and visitor requests, but please include a reply envelope.

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